COURSE OVERVIEW HE0309-4D
Greenhouse Gas (GHG) Calculation & Reporting

Course Title
Greenhouse Gas (GHG) Calculation & Reporting

Course Date/Venue
August 10-13, 2025/Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE

2.4 CEUs (24 PDHs) AWARD

H-STK© INCLUDED

Course Reference
HE0309-4D

Course Duration/Credits
Four Days/2.4 CEUs/24 PDHs

Course Description

This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide delegates with a detailed and up-to-date overview of Greenhouse Gas (GHG) Calculation & Reporting. It covers the operational control in GHG management, GHG reporting boundary, and GHG counting; reporting GHG emission and the ISO 14060 and GHG protocol; quantifying emission, applying data collection and reviewing baseline year and baseline scenario; the GHG emission and removal and checking the GHG quantification; and the materiality of risk, uncertainty estimation and its sources in GHG emission.

During this interactive course, participants will learn the boundaries and GHG inventories; mitigating GHG emissions and the difference between carbon and net zero; the risk and action required including offsetting residual GHG emissions; the GHG quantification and carbon management plan; leading and lagging indicators; and the ISO 14064-1,2 and 3, ISO 14067 and ISO 14068.

Course Objectives

Upon the successful completion of this course, each participant will be able to: -

- Apply and gain an in-depth knowledge on greenhouse gas (GHG) calculation and reporting
- Discuss the operational control in GHG management, GHG reporting boundary, and GHG counting
- Report GHG emission and interpret ISO 14060 and GHG protocol
- Quantify emission, apply data collection and review baseline year and baseline scenario
- Calculate GHG emission and removal and check the GHG quantification
- Recognize materiality of risk, uncertainty estimation and its sources in GHG emission
- Report boundaries and GHG inventories and mitigate GHG emissions
- Differentiate carbon and net Zero and discuss the risk and action required including offsetting residual GHG emissions
- Apply GHG quantification and carbon management plan, as well as identify leading and lagging indicators and discuss ISO 14064-1,2 and 3, ISO 14067 and ISO 14068

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

The course provides an overview of all significant aspects and considerations of greenhouse gas (GHG) calculation and reporting for environmental managers, sustainability professionals, energy managers, regulatory compliance officers, corporate social responsibility (CSR) managers, environmental consultants, auditors, project managers, policy makers and government representatives, supply chain managers, climate change specialist and other technical staff.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours: -

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET- USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **2.4 CEUs** (Continuing Education Units) or **24 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Fee

US$ 4,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Instructor (s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Dr. Tarek Samir, PhD, MSc, BSc, is a **Senior Chemical Engineer** and an **International Expert** in **Analytical Laboratory** with over **20 years** of integrated industrial experience and academic experience as a **University Professor**. His expertise widely covers in the areas of **Laboratory Practice**, **Analytical Measurement & Uncertainty**, **Uncertainty Estimation**, Statistical Process Control (**SPC**), **GC**, **GC/MS**, **HPLC**, **Validation Method**, **Laboratory Equipment**, **Laboratory Quality Management Systems** (**ISO 17025**), Lab Safety & Health, Good Laboratory Practice (**GLP**), **Water Pollution Control**, **Water Distribution** Systems, **Water Networking**, **Hydraulic** Modelling Systems, **Pumping Stations**, **Water Reservoirs**, **Water Storage Tanks**, **Water Treatment**, Extended Activated Sludge Treatment, **Water Analysis**, **Water Treatment** Technology, **MBBR**, **Hydraulic Design**, **Hydraulic Network** System, **Water Pipeline** System, **Water Distribution System**, **Water Quality** Analysis, **Steam Boiler**, **Hydro-Treating Technology**, **Water Storage Tanks**, Quantitative & Qualitative Analysis of Organic Micro-Pollutants, **Water Quality** Management, Advanced **Organic Material & Separation**, **Water Desalination**, **Oil Polluted Wastewater Treatment**, **Reverse Osmosis**, **Water Quality** Assessment, **Water Assurance & Quality Control** and **Measurement Uncertainty Estimation**. Further he is also well versed in **Green House Gas** Accounting, Sustainability and Green Building, **Greenhouse Gas (GHG) Reporting**, Validation and Audit, **Green House Gas (GHG)** Management, **Basics of Organizational Greenhouse Gas** (GHG) Accounting, Lead Auditor **ISO 50001**, **ISO 14001 Awareness**

During Dr. Tarek's career life, he has handled challenging positions wherein he has acquired his wide technical and practical experience in the field of process & chemical industry such as the **Professor**, **Associate Professor**, **Lead Auditor**, **Technical Expert**, **Technical Auditor**, **Assistant Researcher**, **Researcher** and **Senior Instructor/Lecturer** for various companies and universities such as the National Researcher Center, Van Hall Institute – Part of Wagnningen University, Science Valley Academy and Benha University.

Dr. Tarek has a **PhD**, **Master** and **Bachelor** degrees in **Chemical Engineering**. Further, he is a **Certified Instructor/Trainer** and published numerous technical papers, patents and journals. He has further delivered numerous trainings, courses, seminars, conferences and workshops globally.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: Sunday, 10th of August 2025

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 - 0900	***Introduction to GHG Calculation & Reporting***
0900 - 0930	***Operational Control in (GHG) Management***
0930 - 0945	*Break*
0945 - 1130	***GHG Reporting Boundary***
1130 - 1230	***History of GHG Counting***
1230 - 1245	*Break*
1245 – 1330	***Reporting your GHG Emission***
1330 - 1420	***ISO 14060 Scope's & GHG Protocol***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2: Monday, 11th of August 2025

0730 - 0830	***Quantifying your Emissions***
0830 - 0930	***Data collection***
0930 - 0945	*Break*
0945 - 1145	***Baseline Year & Baseline Scenario***
1145 - 1230	***Calculation of GHG Emission & Removal***
1230 - 1245	*Break*
1245 - 1400	***Checking the GHG Quantification***
1400 - 1420	***Materiality of Risk***
1420 - 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3: Tuesday, 12th of August 2025

0730 - 0830	***Uncertainty Estimation & its Sources in GHG Emission***
0830 - 0930	***Reporting Boundaries***
0930 – 0945	*Break*
0945 - 1045	***Reporting GHG Inventories***
1045 – 1230	***Mitigating GHG Emissions***
1230 - 1245	*Break*
1245 – 1330	***Difference Between Carbon Neutrality & Net Zero***
1330 - 1420	***Understanding the Risks & the Actions Required is Essential***
1420 - 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4:	***Wednesday, 13th of August 2025***
0730 – 0830	***Offsetting Residual GHG Emissions***
0830 - 0930	***Quality Matters Related to GHG Quantification***
0930 - 0945	*Break*
0945 - 1130	***Carbon Management Plan***
1130 - 1230	***Leading & Lagging Indicators***
1230 - 1245	*Break*
1245 - 1345	***ISO 14064-1, 2 & 3, ISO 14067 & ISO 14068***
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:

Course Coordinator

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